

## CLAIMS

1. An apparatus for harmonizing operations between a first vocoder of a communication system and a second vocoder of a second communication system, comprising:
  - a first extraction element for extracting tandem-free operation (TFO) information from a received intra-system TFO frame;
  - a second extraction element for extracting TFO information from a received intersystem TFO frame; and
  - a selection element communicatively coupled to the first extraction element and the second extraction element, wherein the selection element is for selecting either extraction element depending upon whether a received frame is an intra-system TFO frame or an intersystem TFO frame.
2. The apparatus of Claim 1, further comprising:
  - a first generator for generating an intra-system TFO frame for transmission; and
  - a second generator for generating an inter-system TFO frame for transmission.
3. The apparatus of Claim 1, wherein the first extraction element is further configured to extract a vocoder frame from the received intra-system TFO frame.
4. The apparatus of Claim 1, wherein the second extraction element is further configured to extract a vocoder frame from the received intersystem TFO frame.
5. The apparatus of Claim 2, wherein the second generator generates the inter-system TFO frame by commandeering an intra-system TFO frame.

6. A method for harmonizing a tandem-free operation feature of a first communication system with a tandem-free operation feature of a second communication system, comprising:

- at a first infrastructure entity of the first communication system, determining extraction capabilities of a second infrastructure entity of the second communication system;

- selecting an appropriate tandem-free operation (TFO) frame format;

- encapsulating a vocoder frame into a TFO frame using the appropriate TFO frame format;

- transmitting the TFO frame to the second infrastructure entity;

- receiving the TFO frame at the second infrastructure entity;

- determining a source type of the TFO frame;

- extracting the contents of the TFO frame according to the source type of the TFO frame.

7. Apparatus for harmonizing a tandem-free operation feature of a first communication system with a tandem-free operation feature of a second communication system, comprising:

- at a first infrastructure entity of the first communication system, means for determining extraction capabilities of a second infrastructure entity of the second communication system;

- means for selecting an appropriate tandem-free operation (TFO) frame format and encapsulating a vocoder frame into a TFO frame using the appropriate TFO frame format;

- means for transmitting the TFO frame to the second infrastructure entity;

- means for receiving the TFO frame at the second infrastructure entity;

and

- means for determining a source type of the TFO frame and extracting the contents of the TFO frame according to the source type of the TFO frame.

8. An apparatus for harmonizing operations between a first vocoder of a communication system and a second vocoder of a second communication system, comprising:

at least one memory element; and

at least one processing element, the processing element configured to implement a set of instructions stored in the at least one memory element, the set of instructions for:

extracting tandem-free operation (TFO) information from a received intra-system TFO frame using a first table; and

extracting TFO information from a received intersystem TFO frame using a second table, wherein a intra-system TFO frame has the same fields as a intersystem TFO frame but the first table and the second table have different bit definitions.